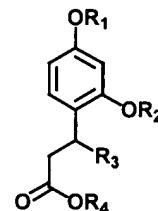


ABSTRACT OF THE DISCLOSURE

Disclosed are coumarin derived compounds of formula I as skin lightening agents alone or in combination with other skin benefit agents and together with a cosmetic vehicle:



5 (I)

Where each or both R₁ and/or R₂ represents hydrogen (H); linear or branched, saturated or unsaturated C₁ – C₁₂ alkyl, alkenyl, acyl, or heteroalkyl (preferably, alkoxy) groups; and

R₃ represents linear or branched, cyclic or acyclic, saturated or unsaturated C₁ – C₁₂ alkyl, alkenyl, cycloalkyl, cycloalkenyl, or heteroalkyl group; and

R₄ represents a hydrogen atom (H); straight or branched, cyclic or acyclic, saturated or unsaturated, containing or not containing a heteroatom C₁-C₂₂ alkyl, alkenyl, cycloalkyl, cycloalkenyl, heteroalkyl, aryl, or heteroaryl group.

In a most preferred embodiment, each R₁, R₂ and R₄ represent H, while R₃ represents a methyl group, referred to herein as a 4-methyl 7-hydroxy-coumarin derivative, or coumarin derived resorcinol derivative, which may be prepared by catalytic (nickel or palladium catalyst) hydrogenation of 4-methyl 7-hydroxy-coumarin followed by hydrolysis. The inventive compounds, compositions and methods have effective skin lightening properties, may be less irritating to the skin, and are cost-effective and relatively simple to manufacture.

Also disclosed are processes for making the inventive compounds of general formula I from 4-substituted-7-hydroxy coumarin derivatives.